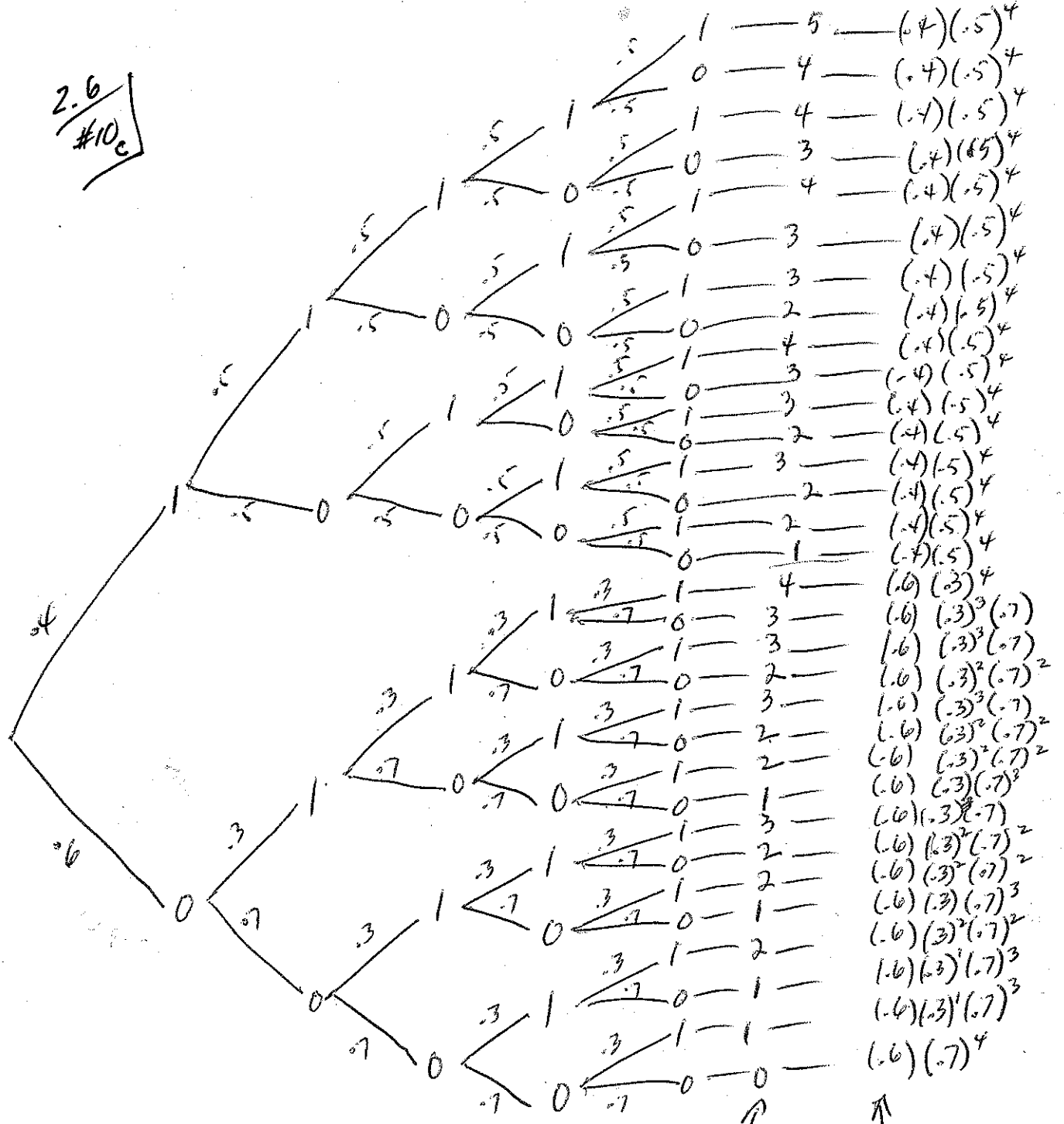
2.6 #10c

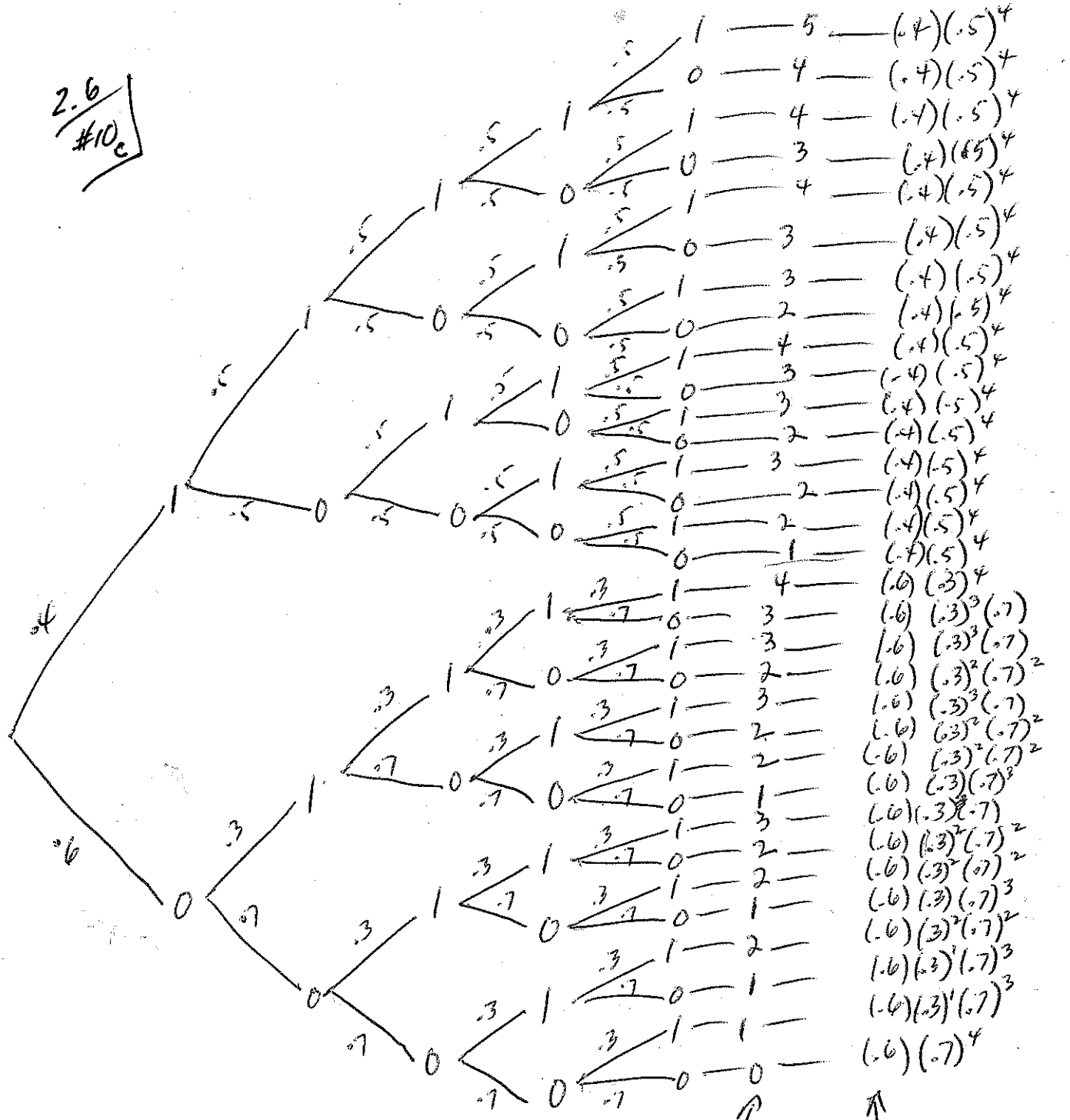


$$E = 0.4\left[1\cdot 1(.5)^4 + 2\cdot 4\cdot(.5)^4 + 3\cdot 6\cdot(.5)^4 + 4\cdot 4(.5)^4 + 5\cdot 1(.5)^4\right]$$
$$+ 0.6\left[0\cdot 1\cdot(.3)^0(.7)^4 + 1\cdot 4\cdot(.3)^1(.7)^3 + 2\cdot 6\cdot(.3)^2(.7)^2 + 3\cdot 4\cdot(.3)^3(.7)^1 + 4\cdot 1\cdot(.3)^4(.7)^0\right]$$

$$E = 0.4\left[\sum_0^4 (k+1)\binom{4}{k}(.5)^{4-k}(.5)^k\right] + 0.6\left[\sum_0^4 k\binom{4}{k}(.3)^k(.7)^{4-k}\right]$$

$$E = 0.4\left[1 + 4(.5)\right] + 0.6\left[4(.3)\right] = 1.92$$ ← expected number of points in 5 throws.

2.6 #10c



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